

**RECEIVED
CENTRAL FAX CENTER****MAR 26 2009****CLAIM AMENDMENTS:**

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (currently amended) The method of ~~claim 1~~claim 28, wherein one of the nodes of the communication system is defined as a master node which initiates said second communication cycle in conjunction with a predetermined trigger signal.
5. (currently amended) The method of claim 4, wherein said master node receives said predetermined trigger signal.
6. (currently amended) The method of claim 4, wherein said master node generates said predetermined trigger signal.
7. (currently amended) The method of claim 4, wherein execution of said second communication cycle is suspended until said master node receives said predetermined trigger signal.
8. (currently amended) The method of claim 4, wherein execution of said second communication cycle is suspended until said master node generates said predetermined trigger signal.
9. (previously presented) The method of claim 4, wherein execution of said second communication cycle is suspended until a predetermined period of time has elapsed.

10. (currently amended) The method of claim 4, wherein said master node issues an event indication signal (EIS) upon receipt or generation of said predetermined trigger signal, the other nodes of the communication system being defined as slave nodes which receive said event indication signal and which resume execution of said second communication cycle upon reception of said event indication signal.
11. (previously presented) The method of claim 10, wherein said second communication cycle comprises a cycle gap into which said nodes enter to suspend execution of said communication cycle, wherein said master node issues said event indication signal and said slave nodes receive said event indication signal to resume execution of said second communication cycle.
12. (original) The method of claim 10, wherein said event indication signal is used for synchronizing said slave nodes.
13. (original) The method of claim 12, wherein said event indication signal is defined as a low/high/low sequence, wherein a high/low transition is used as a synchronizing event for said slave nodes.
14. (original) The method of claim 12, wherein a first valid reception of said event indication signal by one of said slave nodes is used for synchronizing said slave nodes.
15. (currently amended) The method of claim 4, wherein said predetermined trigger signal is generated in said master node.
16. (currently amended) The method of claim 4, wherein said predetermined trigger signal is applied to said master node from a unit external to said master node.

17. (previously presented) The method of claim 4, wherein said second communication cycle comprises a static segment with time slots of a predefined size and in a predefined order.
18. (previously presented) The method of claim 4, wherein said second communication cycle comprises a dynamic segment with time slots for transmitting a variable number of frames of variable length and variable order.
19. (currently amended) A computer readable storage medium ~~on which a computer program is stored~~ storing a program having computer-executable instructions when executed by a processor to execute for execution on at least one of a computer and a microprocessor, wherein the computer program is programmed to execute the method of claim 1 a method for transmitting data within a communication system, the communication system comprising a communication media and a number of nodes connected to the communication media, the method comprising the steps of:
 - a) defining a first communication cycle having a plurality of first time slots;
 - b) assigning each first time slot to one or more nodes;
 - c) triggering the first communication cycle with a time trigger;
 - d) transmitting data across the communication media during the first communication cycle in a time triggered communication mode in response to step c);
 - e) defining a second communication cycle having a plurality of second time slots;
 - f) assigning each second time slot to one or more nodes;
 - g) triggering the second communication cycle with an external

or internal event trigger; and
h) transmitting data across the communication media during
the second communication cycle in an event triggered
communication mode in response to step g).

20. (previously presented) The computer readable medium of claim 19, wherein the computer program is stored in one of a read-only-memory (ROM), a random-access-memory (RAM), and a flash-memory.
21. (cancelled)
22. (currently amended) The node of ~~claim 21~~claim 30, wherein ~~said the node input~~ accommodates a predefined trigger signal and said communication cycle event trigger initiates said second communication cycle upon receipt of said predefined trigger signal.
23. (cancelled)
24. (cancelled)
25. (cancelled)
26. (cancelled)
27. (cancelled)
28. (new) A method for transmitting data within a communication system, the communication system comprising a communication media and a number of nodes connected to the communication media, the method comprising the steps of:

- a) defining a first communication cycle having a plurality of first time slots;
- b) assigning each first time slot to one or more nodes;
- c) triggering the first communication cycle with a time trigger;
- d) transmitting data across the communication media during the first communication cycle in a time triggered communication mode in response to step c);
- e) defining a second communication cycle having a plurality of second time slots;
- f) assigning each second time slot to one or more nodes;
- g) triggering the second communication cycle with an external or internal event trigger; and
- h) transmitting data across the communication media during the second communication cycle in an event triggered communication mode in response to step g).

29. (new) A communication system comprising:

a communication media;
a plurality of nodes connected to the communication media;
means for defining a first communication cycle having a plurality of first time slots;
means for assigning each said first time slot to one or more of said nodes;
means for triggering said first communication cycle with a time trigger;
means for transmitting data across said communication media during said first communication cycle in a time triggered communication mode;
means for defining a second communication cycle having a plurality of second time slots;
means for assigning each said second time slot to one or more

of said nodes;

means for triggering said second communication cycle with an external or internal event trigger; and

means for transmitting data across said communication media during said second communication cycle in an event triggered communication mode.

30. (new) One of a plurality of nodes in a communication system, the communication system having a communication media connecting the plurality of nodes, the node comprising:

means for operating within a first time slot assigned to the node by the communication system in a first communication cycle of a first time triggered communication mode;

means for responding to a time trigger issued by the communication system in said first communication cycle;

means for transmitting data across said communication media during said first communication cycle in said time triggered communication mode;

means for operating within a second time slot assigned to the node by the communication system in a second communication cycle of a second external or internal event triggered communication mode;

means for responding to an event trigger issued by the communication system in said second communication cycle;

and

means for transmitting data across said communication media during said second communication cycle in said event triggered communication mode.